Hewlett-Packard Company PDNO 200300480-1 Inventor: Gargi HP Contact # (650) 236-4868

WHAT IS CLAIMED IS:

- 1. A method for variable speed video playback, comprising:
 - obtaining a set of scores for a plurality of discrete segments in a digital video;
 - enabling a playback of said digital video at a variable playback speed that may change from segment to segment based on said set of scores;
 - receiving a user input to adjust said playback speed for at least one of said segments by modifying at least one of said set of scores; and
 - adjusting said variable playback speed based on said user input.
- 2. The method of claim 1, wherein said scores were computed based on one or more video analysis techniques applied to said segments.
- 3. The method of claim 2, wherein different ones of said video analysis techniques are given different weights in computing said set of scores.
- 4. The method of claim 3, wherein said weight for said video analysis technique is given prior to performing said video analysis technique.
- 5. The method of claim 3, wherein said weight for said video analysis technique is given after performing said video analysis technique.
- 6. The method of claim 3, wherein said adjusting includes reducing the weight of a video analysis technique if that technique fails to substantially differentiate among said segments.
- 7. The method of claim 3, wherein said adjusting includes increasing the weight of a video analysis technique if that technique substantially differentiates among said segments.
- 8. The method of claim 3, wherein said user input includes an instruction to

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modify said weight given to at least one of said video analysis techniques.

9. The method of claim 1, wherein said enabling includes playing a discrete segment of said digital video at a slower speed when said discrete segment has a high score relative to scores for other discrete segments of said digital video.

- 10. The method of claim 1, wherein said enabling includes playing a discrete segment of said digital video at a faster speed when said discrete segment has a low score relative to scores for other discrete segments of said digital video.
- 11. The method of claim 1, wherein said user input includes an instruction to dampen an effect of said set of scores on said variable playback speed.
- 12. The method of claim 1, wherein said user input includes an instruction to amplify an effect of said set of scores on said variable playback speed.
- 13. The method of claim 1, wherein said adjusting includes recalculating said variable playback speed based on said input.
- 14. The method of claim 1, wherein said user input includes setting a maximum playback speed.
- 15. The method of claim 1, wherein said user input includes setting an average playback speed.
- 16. A system for variable speed video playback, comprising:
 - a video playback module configured to:

receive a set of scores for a plurality of discrete segments in a digital video;

enable a playback of said digital video at a variable playback speed that may change from segment to segment based on said set of scores; Hewlett-Packard Company PDNO 200300480-1 Inventor: Gargi

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receive a user input to adjust said playback speed for at least one of said segments by modifying at least one of said set of scores; and

adjust said variable playback speed based on said user input; and

a user interface module configured to provide said user input to said video

playback module.

17. The system of claim 16, wherein said scores were computed based on one or

more video analysis techniques applied to said segments.

18. The system of claim 17, wherein different ones of said video analysis

techniques are given different weights in computing said set of scores.

19. The system of claim 18, wherein said adjust includes reducing the weight of a

video analysis technique if that technique fails to substantially differentiate among

said segments.

20. The system of claim 18, wherein said adjust includes increasing the weight of

a video analysis technique if that technique substantially differentiates among said

segments.

21. The system of claim 18, wherein said user input includes an instruction to

modify said weight given to at least one of said video analysis techniques.

22. The system of claim 16, wherein said enabling of playback includes playing a

discrete segment of said digital video at a slower speed when said discrete segment

has a high score relative to scores for other discrete segments of said digital video.

23. The system of claim 16, wherein said enabling of playback includes playing a

discrete segment of said digital video at a faster speed when said discrete segment has

a low score relative to scores for other discrete segments of said digital video.

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24. The system of claim 16, wherein said user input includes an instruction to dampen an effect of said set of scores on said variable playback speed.

25. The system of claim 16, wherein said user input includes an instruction to

amplify an effect of said set of scores on said variable playback speed.

26. The system of claim 16, wherein said user input includes setting a maximum

playback speed.

27. The system of claim 16, wherein said user input includes setting an average

playback speed.

28. The system of claim 16, wherein said adjustment of said variable playback

speed includes recalculating said variable playback speed based on said input.

29. The system of claim 16, further comprising an output device configured to

display past and future discrete segments in one or more sliding windows.

30. The system of claim 16, further comprising an output device configured to

enable a user selection of one or more past and future discrete segments.

31. A system for variable speed video playback, comprising:

• means for obtaining a set of scores for a plurality of discrete segments in a

digital video;

means for enabling a playback of said digital video at a variable playback

speed that may change from segment to segment based on said set of scores;

means for receiving a user input to adjust said playback speed for at least one

of said segments by modifying at least one of said set of scores; and

means for adjusting said variable playback speed based on said user input.

32. The system of claim 31, further comprising means for enabling a user

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selection of one or more past and future discrete segments.

33. A computer-readable medium for providing variable speed video playback comprising logic instructions that when executed:

- obtain a set of scores for a plurality of discrete segments in a digital video;
- enable a playback of said digital video at a variable playback speed that may change from segment to segment based on said set of scores;
- receive a user input to adjust said playback speed for at least one of said segments by modifying at least one of said set of scores; and
- adjust said variable playback speed based on said user input.
- 34. The computer-readable medium of claim 33, wherein said scores were computed based on one or more video analysis techniques applied to said segments.
- 35. The computer-readable medium of claim 33, wherein different ones of said one or more video analysis techniques are given different weights in computing said set of scores.
- 36. The computer-readable medium of claim 35, wherein said logic instructions to adjust include logic instructions to reduce the weight of a video analysis technique if that technique fails to substantially differentiate among said segments.
- 37. The computer-readable medium of claim 35, wherein said logic instructions to adjust include logic instructions to increase the weight of a video analysis technique if that technique substantially differentiates among said segments.
- 38. The computer-readable medium of claim 35, wherein said user input includes an instruction to modify said weight given to at least one of said video analysis techniques.
- 39. The computer-readable medium of claim 33, wherein said logic instructions to

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enable include logic instructions that when executed play a discrete segment of said

digital video at a slower speed when said discrete segment has a high score relative to

scores for other discrete segments of said digital video.

40. The computer-readable medium of claim 33, wherein said logic instructions to

enable include logic instructions that when executed play a discrete segment of said

digital video at a faster speed when said discrete segment has a low score relative to

scores for other discrete segments of said digital video.

41. The computer-readable medium of claim 33, wherein said user input includes

an instruction to dampen an effect of said set of scores on said variable playback

speed.

42. The computer-readable medium of claim 33, wherein said user input includes

an instruction to amplify an effect of said set of scores on said variable playback

speed.

43. The computer-readable medium of claim 33, wherein said user input includes

setting a maximum playback speed.

44. The computer-readable medium of claim 33, wherein said user input includes

setting an average playback speed.

45. The computer-readable medium of claim 33, wherein said logic instructions to

adjust include logic instructions that when executed recalculate said variable playback

speed based on said input.

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